

Response – Remarks

Claims 5, 7-11 and 13-16 are pending in the patent application.

Claim 5, 7 and 8 have been amended in view of the rejection of claims 5, 7 and 8 under 35 USC § 102 (b) as anticipated by U.S. Patent 3,792,416 to Moulin.

The Moulin '416 patent represents the precise problem of the prior art that the invention overcomes, nameless, the possible wrinkling of the seal flange as explained in paragraphs in paragraphs [0002], [0003], [0004], [0005], [0006] and [0007] of the patent application.

In rejecting the claims, the Examiner states that the method of forming the device is not germane to the issue and consequently “molded” as a descriptor of the skirt has not been given any patentable weight. However, it is the shape of the molded skirt, not the forming process that distinguishes the invention of claims 5, 7 and 8 over the Moulin '416 reference.

In the later rejection of claim 9 the Examiner states, “Regarding claim 9, Moulin fails to disclose that the sleeve has the skirt before the insertion of the sleeve into the interior surface of the cavity.”

It is believed that claims 5, 7 and 8 before amendment do define the shape of the skirt before the insertion of the sleeve into the surface of the cavity and hence claims 5, 7 and 8 before amendment are not anticipated by the Moulin '416 reference. However, claims 5, 6 and 7 have been amended in order to make it absolutely clear that the claimed sleeve does have the skirt before the insertion of the sleeve into the surface of the cavity and hence amended claims 5, 7 and 8 are clearly not anticipated by the Moulin '416 reference

Amended claims 5, 7 and 8 all include:

a sleeve comprising a longitudinal axis and an insertion end;

a molded skirt integrally formed on the sleeve;

wherein the skirt comprises a first integral section extending in a plane which is substantially perpendicular to the longitudinal axis; and

wherein the skirt comprises a *second integral section comprising an interior surface and a sealing surface that extends along the length of the sleeve in a direction opposite to the insertion end such that there is a gap between the interior surface and the sleeve;*

wherein the sealing surface has substantially the same shape as the interior surface of the cavity so that the skirt deforms only a small amount to form a seal between the sealing surface and the interior surface of the cavity when the sleeve is subsequently inserted into the cavity

The Moulin '416 clearly does not disclose such a sleeve. The skirt 158 of the Moulin sleeve 150 is clearly radial as is clear from figure 5 of the Moulin '416 patent. The skirt 158 of the Moulin sleeve comprises only a first integral section extending in a plane which is substantially perpendicular to the longitudinal axis. Moreover, the skirt 158 clearly does not have "*a second integral section comprising an interior surface and a sealing surface that extends along the length of the sleeve in a direction opposite to the insertion end such that there is a gap between the interior surface and the sleeve wherein the sealing surface has substantially the same shape as the interior surface of the cavity so that the skirt deforms only a small amount to form a seal between the sealing surface and the interior surface of the cavity when the sleeve is subsequently inserted into the cavity*" as required by each of claims 5, 7 and 8.

The exclusion of a claimed element from a prior art reference is enough to negate anticipation under 35 USC § 102 by that reference. *Atlas Powder Co. v. E.I. Du Pont De Nemours & Co.*, 224 USPQ 409 (Fed.Cir. 1984).

Hence, amended claims 5, 7 and 8 are not anticipated by the Moulin '416 patent.

The rejection of claims 9-11 under 35 U.S.C. § 103 (a) as being unpatentable over U.S. Patent 3,792,416 to Moulin in view of U.S. Patent 4,627,647 to Hauff is respectfully traversed.

The Hauff '647 patent discloses a wall feedthrough fitting for a conduit 1, such as a pipe, cable, or the like that extends through the cylindrical passage 2 of a concrete wall 3. The fitting comprises an elastomeric sleeve 4 and a two piece tightening ring 7 that has screw thread ridges 9. The elastomeric ring 4 has an annular groove 8 that tapers toward the open direction as best shown in figure 4 of the Hauff '647 patent.

The Hauff '647 patent is not clear if the conduit 1 is fit through the passage 2 first and then the elastomeric sleeve 4 is inserted into the end of the passage 2 or if the elastomeric sleeve 4 is fit into the end of the passage first. In any event, after the conduit 1 is permanently emplaced, the ring 7 is screwed into the groove 8 thereby tightening the assembly together and making a very hermetic seal. See column 3, lines 46-53 of the Hauff '647 patent.

As to claim 9-11, the Examiner admits that admits that "Moulin fails to disclose that the sleeve has the skirt before insertion of the skirt into the interior surface of the cavity. However, the Examiner maintains that, "It would have been obvious at the time the invention was made to incorporate a skirt, as taught by Hauff in a sealing device as described by Moulin, in order to make a better sealing arrangement between the inside surface of the cavity and the sealing surface and to prevent loss in the sealing contact *because of excessive wrinkles.*" See the second paragraph on page 4 of the Office Action of March 2, 2004.

The Examiner's opinion is based on an observation that "Hauff teaches that it is known in the art to have a sleeve (4) with a formed skirt sealingly engaged to the interior of the cavity (5) before the insertion of the sleeve into the interior surface of the cavity." See the last paragraph on page 2 of the Office Action of March 2, 2004

The Hauff sleeve 4 is in fact a thick sleeve 4 with a narrow tapered slot 8 as best shown in figure 4 of the Hauff '647 patent. Moreover, the mere fact that the Hauff shows a sleeve with a narrow tapered slot does not suggest that the Moulin

sleeve 150 should be formed with a formed skirt to “in order to make a better sealing arrangement between the inside surface of the cavity and the sealing surface and to prevent loss in the sealing contact because of excessive wrinkles.” The Moulin’ 416 patent does not mention anything about wrinkles and neither does the Hauff ‘647 patent.

The only thing that Hauff ‘647 patent teaches with respect to sealing is the provision of a relatively thick seal sleeve 4 having a narrow tapered slot 8 into which a ring 7 is screwed to improve the sealing. The modification proposed by the Examiner is not suggested by the two references themselves. Rather, the modification is hindsight reconstruction of the prior art using the applicant’s invention as a guide.

Moreover, the secondary Hauff ‘647 patent as used by the Examiner is non-analogous art and the claims have been improperly rejected for a second reason.

Two criteria have developed for determining whether prior art is analogous: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the inventor’s field of endeavor, whether the reference is still pertinent to the particular problem with which the inventor is involved. *In re Clay*, 23 USPQ2d, 1058, 1060, (FedCir 1992).

As stated on page 1 of the patent application, Applicant’s field of endeavor is high pressure seals used in electrical connectors, not the field of wall feed through fittings. Thus the Hauff ‘647 patent fails the first criterion of being from the same field of endeavor. Moreover, the wall feed through fitting of the Hauff ‘647 patent is not pertinent to the problem which applicant faced, which is the sealing loss as a result of the wrinkling of a flexible, radial flange, such as the Moulin flexible radial flange (150) when it is bent into sealing engagement with a sealing surface as shown in figures 7a through 7d of the Moulin ‘416 patent. Hence the Hauff ‘647 patent as used by the Examiner is non-analogous art that cannot be used in an obviousness rejection under 35 USC § 103(a).

Consequently claims 9-11 are patentable for a second reason.

New claims 13-16 have been added. Claims 13 and 16 clearly state that the sealing surface of the skirt has "substantially the same shape as the interior surface of the connector cavity so that the skirt deforms only a small amount to form a seal between the sealing surface and the interior surface of the connector cavity when the sleeve is inserted into the connector cavity such that the sealing surface is not substantially wrinkled when the sealing surface is in sealing contact with the interior surface of the connector cavity."

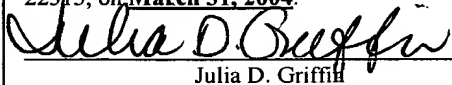
Thus claims 13 and 16 are not anticipated by the Moulin '416 patent nor are the claims obvious in view of the Moulin '416 patent and the Hauff '647 patent taken in combination. This also applies to dependant claims 14 and 15.

With respect to the dependant claims, there is absolutely no suggestion in the two references to make the second integral section of the skirt shorter (claim 14) and make room for the wiping land (claim 15).

Examination of claims 5, 7-11, and 13-16 in view of the foregoing remarks and amendments is respectfully requested.

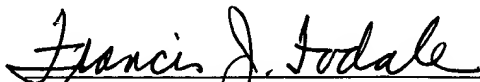
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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to the Commissioner for Patents, P.O. Box 1450 Alexandria, Virginia 22313, on March 31, 2004.


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